

Acrylic Resin

Plexiglas® DR®

PROPERTIES	VALUE	UNITS	TEST METHOD
Physical			
Melt Flow Rate (230°C / 3.8 kg)	1.0	g / 10 min	ASTM D1238
Specific Gravity	1.15		ASTM D792
Mold Shrinkage	0.3-0.8	%	ASTM D955
Water Absorption (24 hr. immersion)	0.4	% weight gain	ASTM D570
Mechanical			
Tensile Strength @ Maximum	5,500	PSI	ASTM D638
Tensile Elongation @ Break	50	%	"
Tensile Modulus	270,000	PSI	"
Flexural Strength, maximum (Yield)	10,300	PSI	ASTM D790
Flexural Modulus	270,000	PSI	ASTM D790
Notched Izod Impact(73°F/23°C)	1.1	ft-lb/in notch	ASTM D256
Rockwell Hardness	45	M	ASTM D785
Thermal			
HDT (0.455 MPa; annealed) ¹	192	°F	ASTM D648
HDT (1.82 MPa; annealed) ¹	175	°F	ASTM D648
Vicat Softening Point (50°C/hr; 10N)	208	°F	ASTM D1525
Vicat Softening Point (50°C/hr; 50N)	187	°F	ASTM D1525
Thermal Conductivity	1.5	BTU/hr*ft²*F/in	ASTM C177
Optical			
Refractive Index (ND @ 73°F)	1.49		ASTM D542
Luminous Transmittance (0.125"/3.2 mm.)	90	%	ASTM D1003
Haze (0.125 in./3.2 mm.)	<2	%	ASTM D1003
ASTM Classification		PMMA 0231V1	ASTM D788